Smoky River Wind Project

Newsletter: October 2023

ABO Wind Canada Ltd. (ABO Wind) would like to thank all those that attended the April 2023 open house for our 160 MW Smoky River Wind Project (Smoky River / the Project). Held in the Falher Regional Recreational Complex, the event had an amazing turnout of over 130 attendees. Our ABO Wind team presented a preliminary project layout, provided information and responded to questions throughout the night. As we progress through the consultation and project development process, we will continue to gather data and stakeholder input and in turn provide updated project information as it becomes available.

Moratorium on Approvals for Renewable Energy Projects

The Alberta Government recently announced that the Alberta Utilities Commission (AUC) paused approvals for renewable electricity generation of new power plants over one megawatt beginning August 03, 2023, and ending February 29th, 2024. The AUC will hold an inquiry into the development of renewable energy projects in Alberta including considerations for agricultural land, viewscapes, reclamation requirements and the development of projects on Crown land. Once the review is complete, we will follow any new guidelines and requirements as required by the AUC. This moratorium does not impact ABO Wind's decision to move forward with Smoky River. We are committed to the Project and will continue consultation and preparing our application for submission to the AUC.



The Project

The Project in the Municipal District (M.D.) of Smoky River is located on privately-owned land between the Town of Falher and the Village of Nampa and consists of up to 27 turbines. In addition to the turbines, the Project will include access roads, a transmission line, underground collector lines/system, a substation, and a meteorological (Met) tower.

The Project layout and design is guided by input from stakeholders, technical experts, and the consideration of environmental and municipal setbacks and constraints. Based on this input, the Project boundary has been updated since the first newsletter released in February 2023 and the Project layout and turbine locations have been updated since the preliminary layout first shown at the open house in April, 2023. Turbines were relocated to increase the distance from individuals' residences and reduce turbines near an Important Bird Area (IBA). Please refer to the Project map in this brochure.

The previous layout can be found on our website: www.smokyriverwind.com



Estimated Number of Turbines: **25-27**



Nameplate Capacity of Project: **160 MW** Nameplate Capacity of each turbine: **6.2 to 7.2 MW**



Estimated Hub Height of turbines: **100 - 120 metres**



Estimated blade length: **80 - 90 metres**



Estimated annual amount of renewable energy produced: enough for **~65,000 homes**



How much CO2 will it displace over the life of the Project: **~7.5 million tonnes** (Equivalent to removing 94,000 cars from the road)



What is the size of the Project Boundary: ~ 7700 acres



What is the Project Footprint (Construction land): **~350 acres** Operational: **25 acres**

Open House: November 1st from 6:00 pm to 8:30 pm

ABO Wind will host an open house event on Wednesday, November 01, 2023, at the Jean Côté Community Hall (4902 50th Ave, Jean Côté). Doors will open at 6:00 pm with a presentation beginning at 6:30 pm. The presentation will respond to common questions that have been received from stakeholders prior to the open house. There will not be an open mic session following the presentation. Instead, we ask attendees to send questions to the project contact prior to the open house and we will provide a response at the presentation. From 7:30 pm to 8:30 pm the ABO Wind Team will divide into technical disciplines around the hall and will be available to discuss the Project and answer individuals' questions. The ABO Wind team will consist of experts in environment, health, construction, property value, noise and shadow flicker. Refreshments will be provided.

*Please note that the current layout designs utilize the Siemens Gamesa SG-170 6.6 wind turbine. The turbine model is subject to change based on the timing of approval and the supply chain.

Frequently Asked Questions (FAQs) from the April 2023 Open House

We understand that not all interested parties were able to attend the open house and that some attendees may not have been able to speak to each technical expert. Based on feedback forms and stakeholder input, we have compiled a list of the FAQs and responses. If you have any follow-up questions, please contact ABO Wind directly for additional information.

1. What is the impact of a wind project on human health?	A growing number of scientific, medical, and acoustical experts have studied the subject of wind turbines and health around the world and published more than 25 comprehensive reviews on potential health effects. They conclude that there is no scientific evidence for negative effects of wind turbines on human health. In fact, wind energy provides electricity without emitting greenhouse gases or air pollutants and uses no freshwater to generate electricity – creating a healthier environment for people and wildlife. Health Canada published its own study in 2014, which found that wind turbine noise exposure was not associated with self-reported medical illnesses and health conditions. (<i>Health Canada, 2014, https://www.canada.ca/en/health-canada/services/health-risks-safety/ radiation/everyday-things-emit-radiation/windturbine-noise/wind-turbine-noise-health-study- summary-results.html)</i>)
2. What will be the impact of a wind project on property value?	The majority of studies completed in the United States indicate that there is no statistically significant variation in value that can be associated with wind turbines. There have been several studies completed in Canada, all in the province of Ontario. Almost all of these studies, found no impact of the turbines on land values. At this time, sufficient data does not exist to provide Alberta-based, comparable research.
3. Is the Project green?	Results show that in research that considered ~3000 life cycle assessment studies on utility-scale electricity generation, wind energy produces significantly less grams of CO2 per kilowatt hour than fossil fuels. When taking into account the extracting of resources, manufacturing, operations and decommissioning of projects coal produces almost 22 times as much CO2 (green house gas) than a wind and battery project. Natural gas produces more than 10.5 times as much. <i>Source: NREL's Life Cycle Greenhouse Gas Emissions from Electricity Generation: Update; September 2021</i>

4. How will the Project be decommissioned? What is recycled?	The main components of a wind turbine that can be recycled, repurposed, or salvaged include steel tower sections, steel reinforcement, electrical equipment and cables, precious metals, and concrete. Other materials or pieces of equipment that cannot be recycled, repurposed, or salvaged will be disposed of according to local/provincial regulations. Turbine blades have historically been disposed of in landfills due to challenges of recycling fibreglass. Recently, two of the largest turbine manufacturers have developed processes to recycle these blades. Our expectations are that blade recycling processes will be commercially available at the time of our project decommissioning. The value of the recycled materials can offset as much as 70% of the decommissioning. It is expected that the Alberta Utility Commission (AUC) will establish decommissioning requirements during the current moratorium. ABO Wind will comply with these requirements.
5. What is the impact of turbines on birds including during migratory periods?	At this time, the third-party environmental consultant, McCallum Environmental, has not seen evidence of specific migratory corridor being affected by the Project. Typically, the migratory pathway for birds is very wide, almost across half the province and not just a few hundred meters, and the routes of migrating birds change every year. We would expect some mortality of birds from the Project, however, post-construction mortality searches will be conducted for at least three years after the project is built, which will help determine if there are turbines in certain areas that are impacting more birds than other turbines.
6. Is the Project subsidized by the government?	ABO Wind Canada Ltd. is 100% owned by its parent company, ABO Wind AG, located in Germany. ABO Wind AG is funding all the costs for project development. Once the Project is ready for construction, ABO Wind would likely work with banks to secure project financing. We have good relationships with reputable Canadian and European banks. Smoky River is viable without government subsidy or tax credits; however, if tax credits or subsidies become available prior to the time of construction, then we will assess the eligibility and could utilize these initiatives, similar to other industries in Canada.

Noise and Shadow Flicker

Shadow Flicker

Shadow flicker can occur when the sun passes behind the rotor of a wind turbine and casts a moving shadow over a residence. Where this shadow passes over a narrow opening, such as a window, the moving rotor can cause the light levels to 'flicker'. The shadow flicker effect can only be experienced inside buildings. The potential effects of shadow flicker have been modelled and considered throughout the layout redesign process for this Project. The results of the shadow flicker analysis will be presented at the open house.

Noise Impact

The Project will have sound generating infrastructure consisting of the wind turbines and substation transformers. The adjacent figure displays both the proposed turbine layout and the 40 dBA noise contour for the Project sound only using the Siemens Gamesa 6.6 MW wind turbine as a model. At the upcoming open house, ABO Wind will present a revised map that will include the updated noise contour, encompassing both the Project and third-party noise emissions into the 40 dBA contour. The AUC's Rule 012 is the guiding document



for noise emissions from power plants in Alberta. Rural areas generally have a permissible nighttime sound level of 40 dBA at all receptors. However, receptors that are 30 m to 500 m from heavily travelled roads or rail lines have a permissible sound level of 45 dBA due to the high level of background noise.

Visualizations

Visualizations are prepared to demonstrate how the Project will appear on the landscape from different viewpoints.



 Viewpoint Location:
 1456233 Mil:54729
 Camera:
 Wikes 20000
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 Viewpoint Exvedion:
 524m AOD
 Lana:
 35mm
 Miles 2000
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 Viewpoint Exvedion:
 237
 Genera Midght
 1.5 Miles
 Miles 2000
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 Nearest Ruthine:
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 Bate:
 04/04/2012 11:00
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Viewpoint 01





Viewpoint 02



 Viewpoint Location
 1/31/30/36/200190
 Camera:
 Miles 03000

 Viewpoint Elevation
 53/m
 Lens:
 25mm

 View Disolition:
 557
 Camera Height:
 15.405,

 Rearest Netline:
 4,5m
 Bete and Time;
 04/00/2021 19:55

Viewpoint 03



Lens: Camera Height

Viewpoint 04



Environmental and Regulatory Process

ABO Wind contracted third-party experts, McCallum Environmental Ltd., to complete the comprehensive environmental assessments for Smoky River. The information gathered from the environmental field program is included in the Renewable Energy Submission Report, which was submitted to Alberta Environment and Protected Areas (EPA) this October. EPA will issue a Renewable Energy Referral Letter (Referral Letter) that will outline an overall Project risk ranking.

Once the EPA Referral Letter is issued an application is made to the AUC under Rule 007 - Application - Wind Power Plants 10 Megawatts or greater - urban and rural. Smoky River expects to submit the application in Q2, 2024, based on the expected timeline for the Referral Letter. The Public will be informed of the Application submission.

Schedule

Environmental Studies	Complete
Grid Connection Study	Ongoing
Commence Public Consultation	Q1 2023
Submission of AUC Application	Q1/Q2 2024
Submit Renewable Energy Referral Report to the EPA	Q4 2024
Submission of Development Permit Application	Q4 2024
Anticipated AUC Approval	Q4 2024
Start of Project Construction	Q2 2025
Project Operational	Q4 2026

Benefits

ABO Wind commits to creating a lasting positive impact in the communities where we develop renewable projects. The Project will generate the following positive benefits for the surrounding community:

- Tax dollars for the M.D. of Smoky River
- Millions in contracts for local goods and service providers
- 150 to 200 jobs to the region
- Local employment opportunities
- Royalties for landowners with project infrastructure on their property
- A Community Fund for local initiatives
- Health benefits by offsetting emissions that would be otherwise be emitted through the burning of fossil fuels. Smoky River will generate electricity without emitting greenhouse gases or air pollutants or any use of freshwater.

In the Community

ABO Wind commits to growing our relationship with the communities where we operate, and it is part of our fundamental values that these communities benefit from our presence. As we learn more about each community, we discover initiatives that would benefit from our contributions. We are proud to be a sponsor of the 2023 Honey Festival and to have funded the purchase of a muchneeded new washer and dryer for the publicly-funded Busy Bee Daycare in Falher.



Project Contact and Consultation

The consultation process is guided by the AUC Rule 007. ABO Wind commits to forthright and meaningful communication that is timely and respectful. Through the ongoing provision of project information, we aim to incite discussion with interested parties and commit to the thoughtful consideration of feedback into our project planning in order to mitigate and avoid impact. Consultation will continue throughout the life of the Project.

If you have questions about the Regulatory and Consultation Process, you can contact the AUC at 403-592-4500 or info@auc.ab.ca or visit their website at **www.auc.ab.ca**.

We look forward to hearing from you. For more information, please visit our website at **www.smokyriverwind.com** or contact us at:



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ABO Wind Canada Ltd: ABO Wind was founded in 1996 and has been operational in Canada since 2017 and is now a leading developer of renewable energy projects worldwide. ABO Wind focuses on developing wind, solar, energy storage, and green hydrogen projects throughout Canada.